

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

[PRICE 6D.]

[illegible]

and which all were sensible that the back part of the machine had been red-hot during the trip--thus confirming Mr. Kearney's report. The cause of this I will explain when I come to comment on Mr. Hall's objections and mentioned introduction of the atmospheric air. My father's opinion shall appear in my next.

I am, gentlemen, your obedient servant.

ON THE RESISTANCE OF WATER TO BODIES MOVING THROUGH IT.

The general monthly meeting of the Liverpool Polytechnic Society took place on Tuesday evening, the 13th instant, at the Royal Institution.

The CHAIRMAN, in a brief address, expressed the pleasure he felt, after the vacation, to resume the office he had the honour to fill; and, while he lamented the commercial depression that had existed, and still continued to a considerable extent, and which tended to throw a damp upon scientific pursuits, he congratulated the meeting on the improvement that had taken place, and which he trusted would call forth new exertions on the part of the members to further the objects of the society. During the recess, the committee had determined to award prizes, at the close of the present session, for communications, &c., of *adequate merit*, on several subjects; and, in doing so, it was thought advisable, in order to greater encouragement, to receive communications from parties at a distance, as well as from those resident in the town. He then called on Mr. John Steel for his promised communication "On the Resistance of Water to Bodily Motion through it."

For the resistance of water to bodies moving through it. Mr. STEEL said, it is impossible to obtain correct ideas respecting the resistance of water to bodies moving through it, without possessing a clear understanding of the laws affecting the generation and destruction of vortices, to promote which object I shall direct your attention to the existence of bodies, by which is understood the disposition that all matter has to remain in any state in which it may be placed, whether of motion or rest, in conformity to which principle it is held that there is an essential difference between the action of a body in motion and the resistance of a body at rest. In case of impact between them, they both resist; or, as Galileo once expresses it, "a body in motion resists not while its motion continues, but while it forces another body at rest to resist not while it continues at rest, but while it is requiring motion." From this principle of inertia it is obvious in case a moving body meets with any obstacle to its motion. The obstacle (of whatever kind) will give a resistance proportionate to the force of the blow with which it is struck—that is to say, if the body in motion has a velocity of ten feet per second, and impinges on another body at rest, there will be a given resistance, which resistance will be 4-fold provided the velocity of the moving body be increased to twenty feet per second. In addition to inertia, there is likewise the cohesiveness between the particles of bodies which may and does occasion resistance, both in solids and fluids. Thus, in the case of a log of wood lying loosely on the ground, and a projectile being sent against it, the resistance to the projectile will depend on the cohesiveness and inertia combined, for, opposing the force of the blow does not separate the particles or fibres of the wood, the projectile will meet a resistance equal to the whole momentum of the log of wood, because, as one particle cannot move without the others, unless separation takes place, and as, by the opposition, the force of the blow is not able to effect the separation of the particles, the inertia of the entire mass will be the resistance to the moving body; or, suppose, again, that the log of wood be fixed in the ground endwise, and a projectile be sent against it, although the blow would be quite strong enough to overcome the inertia of the wood, yet, as it is fixed in the ground, it will not, perhaps, move, and in such case the resistance will be composed of the inertia of the wood, the inertia of the soil in which it is fixed, and the cohesiveness of wood (in each other) and unless the latter resistance of itself were greater than what the force of the blow could overcome, it is obvious the motion of the projectile could not be effectually destroyed, as the wood would break. Having stated the laws of resistance from inertia, the next inquiry is—In what manner are we to estimate the comparative resistances of bodies? and how are we to measure the forces of various powers? It is clear that to measure any force we must do so by its effects, and the Newtonian mode; comparing the effects of a direct power is to compare their contemporary effects—that is, their effects in any give; thus.—[Mr. Steel here quoted from several authors, expressly pointing out the absolute necessity of cause being time in all comparisons of powers].—By applying the principles laid down, the resistance of water to bodies moving through it becomes a matter easily understood, because, as the cohesion between the particles of water is almost, if not altogether, insupportable, the resistance of water will consist entirely of inertia, the laws of which are simple, but, from not attending to them, great difficulties have been supposed to exist in the calculations of the resistance of fluids, the general principles of which, as stated by writers on mechanics, is, that the resistance of fluids to bodies moving through them vary as the squares of the velocities, because, at double velocities, the particles of water are double resistance, and, further, is the same time the moving body has six times as much more, twice the number of particles; but it is to be observed that this statement of the law of fluid resistance always supposes that in the comparison of the resistance at different velocities the same time is employed in the experiments, for the Newtonian theory is expressly based on that supposition, which is fully stated in *Parson's Hydrostatics*, to the effect that the resistance of fluids (like the resistance of solids) is to be measured by the quantity of motion acquired by the fluid, or by the quantity of motion lost by the moving body in a given time, and, as the latter is the more easily measured, the resistance of fluids is generally measured in that manner. It is important to observe, then, that the philosophic theory is not, to produce a double velocity in a moving body. There must be exerted power of double intensity, which is to be supplied twice as fast, which is the rudiments of quadruplex theory of the books, but which theory practical engineers, philosophers too, have strangely misunderstood in some. That, to produce a double velocity, it is requisite to exert a power of quadruplex intensity, having to be supplied twice as fast, thereby necessitating an absolute quadruplex of power in the same time as it is, when the velocities are at 1 and 2. To illustrate this point, Mr. Steel quoted from Mr. Bouth's pamphlet in *Theory and Practice of Propelling through Water*, and from Gordon's *Elementary Mechanics*, containing the statement made by Mr. Palmer, before the committee of the House of Commons in 1823, on the Manchester railway Bill, and also from the evidence of Mr. Ruxford, the engineer, as given before the same committee. This error of the engineer's has arisen from the manner of making experiments, in which weights have been the motive power, for the engineer's theory has rested on the fact, that when the same arrangement of machine was used in the experiments at different velocities, there was always required a quadruplex weight to impart a double velocity. Thus, in Colonel Bouth's experiments, made for the Society of Naval Architecture, it appeared that when he doubled the velocity of his boats moving through water, he had to quadruple his weight, and when the velocity of his boat was increased three times, he had to increase his weight nine times. Mr. Bouth was the first to make experiments in which, at a current velocity of the boat, he altered his machine, and it was matter of surprise to find a great difference between the results of his experiments as a static mode, and of experiments made in the ordinary method, and he only attributed the difference in the results of the laws of gravitation, affecting bodies falling at different velocities; but he had not a just idea of the quadruplex theory, and, consequently, did not arrive at a sound conclusion in his matter. Mr. Bouth's experiments were made on a small boat, a large length of water. He affixed a string to the boat, which string passed over a pulley at the end of the trough, so as to keep it always in an oblique position; and then the string was carried upwards, and passed and pulled hard on a shaft of light wood, upon which were pulleys of various sizes. His first experiment was made by hanging a 2 lb. weight on a scale of the same size so that it with the string from the boat extended in a trench was, the 2 lb. weight descended 2 ft. 6 in. in six seconds, dragging the boat the same distance in the same time. Everything remaining the boat, he substituted an 8 lb. weight for the 2 lb., and then the result was—0.6 m. weight descended 2 ft. 6 in. in three seconds, dragging the boat the same distance in the same time. These two experiments were in conformity with the common theory—viz., a quadruplex weight or power expended to give that when a double velocity was given to the boat. How is this to be explained? Facts never contradict each other. Now, then, is this to be explained with the theory before stated? It is a fact, that all bodies, if unimpeded, would fall at the same velocity; thus, a feather and a stone, in a vacuum, fall at the same speed, but, in the atmosphere, the feather would slowly and the stone quickly, the difference being attributed to the resistance of the air. It is obvious, if the resistance of the air were the same in the weight of the globe as it did to the weight of the feather, that a feather would fall at the same rate. From this it is manifest that a difference of velocity in falling bodies can only take place when there is a difference of gravity between the resistance and weight. By applying this principle to Mr. Bouth's experiments, the difficulty is cleared up. We find the 2 lb. weight gave a certain velocity in the trench, which, by the law of inertia, would occasion a corresponding resistance. Exceeding the weight to fall at a double speed, by increasing the weight to 8 lb., it gave a double velocity to

the boat, thereby occasioning a double resistance in the water; but, before the boat could attain a double velocity, the weight would have to fall twice as fast as in the first experiment, which could not happen unless the relation between the weight and the resistance were doubled—that is to say, as the boat, at a double velocity, has to overcome a double resistance, it will require double power; and as the ratio between the weight and resistance has also to be doubled before the weight can fall twice as fast, there will be required double power for that also, making a quadruple weight (not power) requisite to produce a double velocity, and to overcome its concomitant double resistance. Mr. Booth's third and sixth experiments were made by causing the string of the boat to pass over a pulley twice the size of that to which the weight was attached—consequently, the boat was dragged at twice the speed of that at which the weight fell. The result was, as between experiments 3 and 6, the same ratio of resistance maintained as between 1 and 2, but when Nos. 3 or 6 was compared with No. 2 there was a wonderful difference. In No. 2 it required 5 lbs. falling 7 ft. 6 in. in three seconds to drag the boat 7 ft. 6 in. in three seconds; in No. 3 it only required 5 lbs. falling 7 ft. 6 in. in six seconds to drag the boat 16 feet in six seconds, the motion of the boat being at the same rate as in No. 2; but observe, the weight only fell at half the rate as in No. 2, and, consequently, the relation between weights and resistance were different, and taking into account that the friction of the shaft was also different, we have a full explanation of the whole matter; for, according to the theory now advocated, a quadruple weight falling the same distance, and dragging a boat at double leverage, will produce exactly the requisite conditions of the quadruple theory—that is, a double power moving at double speed; but in Mr. Booth's third experiment there was only 5 lbs., and 6 ft. To what is the difference attributable? Some persons may doubt of the friction being sufficient to account for the difference as between 6 lbs. and 5 lbs., but it is easily shown to be so. The axle of Mr. Booth's shaft consisted of half-inch iron, working in a hole in a prop made of wood; and there does not appear to have been any means taken to obviate the enormous friction consequent upon such an arrangement, as, on Mr. Booth being applied to on the subject, his answer does not mention that such means had been taken, and as the shaft was made of light wood, it is reasonable to suppose the prop was of the same material. It is to be observed, that friction is a thing but imperfectly known, but there is sufficient known to assure us that increase of weight upon an axle makes a difference in the friction, and also that an increase of speed makes a difference; and as in No. 2 the weight was 5 lbs., and in No. 3 only 5 lbs., and as in No. 2 the axle turned round twice as fast as in No. 3, it is evident there must have been much more friction in experiment No. 2 than in No. 3. I am aware engineers have a theory that friction is the same at all velocities, but it can easily be shown such is absurd. Mr. Steel here quoted from Mr. Booth's pamphlet, Gordon, and others, stating this principle, more especially as referable to railroads, upon which subject he then proceeded. It is surprising to find men of eminent ability, in the face of their own every-day experience, adopting such a theory; thus it appears admitted on all hands, that supposing the load to remain the same in a railroad train, it will require an engine of double power to drag it at a double speed, and as in the same time the engine will travel twice as far; it is obvious that there will be consumed a quadruple quantity of steam, because, as the area of the piston will be double, each stroke will consume a double quantity of steam, and to go double distance the engine will have to make twice the number of strokes. It is true, that if you merely estimate the consumption of steam, while travelling a given distance, that then the quantity of steam consumed will only be double; but that would be to set at naught one of the fundamental laws of Newtonian philosophy, which is, to estimate various powers and resistances by their contemporary effects—that is to say, by their effects in a given time, in which case railroad travelling has no advantage over water conveyance, in which the law is undoubted. That the resistances at different velocities is as the squares of the velocities." But it may be objected to me, if you maintain that it does not require an octuple expenditure of steam-power in a given time to propel a boat through water at a double speed; how do you reconcile your theory to practice? For instance, Mr. Steward read, to the Society of Engineers, a table of the practical results of steam navigation, which approximated very closely to the octuple theory—in this I answer, that a mere table of results is not of much authority without the data from which it was calculated; for men of the greatest eminence occasionally make great errors in calculating the results of their own experiments; thus, in Mr. Wood's work on railroads, he gives the table of the power of locomotive engines, stating, that taking an engine of given power it will be able to drag different loads at different velocities—viz., at twenty miles an hour, twenty tons; fifteen, forty tons; ten, eighty tons; which is exactly the octuple theory, because, at twenty miles an hour, the engine will use twice the quantity of steam it uses at ten miles an hour, supposing it to be at work for an hour in both cases, and we may, therefore, take the table as showing that the same quantity of steam at double speed will only drag one-eighth the weight that it can drag at single speed. The most surprising part of this table is, that it contradicts the experiments made by Mr. Wood himself, and is in opposition to every other authority; for instance, Mr. Rastick's table in the *British Encyclopedia*, article "Railroads." On examining the report of the evidence before the Committee of the House of Commons of 1825, I find that both the promoters and opponents of the Liverpool and Manchester Railroad Bill were quite satisfied that on a railroad, if you applied a given power to a given load, you always produced the same effect, no matter at what velocity you dragged the load; therefore on a canal, if you doubled the velocity you had to increase the power eight times; and to prove this position Mr. Palmer calculated a table, which he handed into the committee, stating the comparative effect in dragging loads as between a canal and railway. By the table it appears the canal load was much greater than the railroad effect at all velocities less than 45 miles per hour, but at higher velocities the railway effect was infinitely greater on the canal effect. Thus the effect of 1 lb. at four miles per hour per canal was 200, per railway 180; 1 lb. at two miles per hour per canal was 1600, per railway 180. In conclusion, Mr. Steel stated that the great difference between steam-vessels and locomotive carriages was, that the fulcrum of the former was moveable, but the fulcrum of the locomotive was fixed; there is also a difference in the increase of resistance at high speed from the wave the steamer created at her bow, and also from the water not closing upon her stern as she passed through it, which two kinds of resistance are denominated by Colonel Boscawen as plus and minus pressure, on the object of waves. Mr. Steel read some extracts from the report made by Mr. J. S. Russell to the British Association in 1832 and 1833, but as they did not immediately reference to the laws of inertia, we do not deem it necessary to quote them.—Mr. Steel was heard with much attention, and was cheered at the close of his address.

The Chairman invited any remarks which gentlemen present might think fit to make, and a short discussion ensued, in which Mr. Booth, Mr. Lord, Mr. Steel, the chairman, and a few others took part. Mr. Booth supported the accuracy of his experiments, and Mr. Lord also questioned some of the statements of Mr. Steel, who explained, and urged with equal confidence the accuracy of his experiments, and the deductions he had drawn from them. The chairman remarked (and this appeared to be admitted by them) that in the case now required to propel a vessel through the water, much depended upon the form or model of the vessel's bottom.—A vote of thanks was passed to Mr. Steel for his communication.—*Liverpool Standard.*

IRON VESSELS.—There are now in the Iron shipbuilding yard of Mr. on Ltd., of North Birkenhead, two vessels of rather singular construction. The first vessel is intended for a floating light for the entrance of Mersey. It is much longer than the present light ships, and is expected to have less motion, even in a rough sea, than the short wood vessels in use. It will be ready for sea in about two months. The second is building for the honorable the East India Company. It is intended for a pilot boat in the Humber. Unlike our pilot boats, which are built, it is of 200 tons burthen, and of more than ordinary breadth of beam. Its interior is to be completely finished in Liverpool. In the hold will be large tanks for holding water, with which, it appears, the boats on the Calcutta station always go to sea, that, in the event of an ill wind with ships short of water, they may supply them with an indispensable article. The cabin will be a spacious apartment, lofty and well-ventilated, with berths all round for the pilots. We need scarcely say, after the heading of this paragraph, that except the docks and the keels, these vessels are wholly built of iron.

A scientific expedition, under the direction of the Academy of Sciences at St. Petersburg, is about to proceed immediately to Siberia, to explore west country between the rivers Yenisei and Chertanga, extending to Lap Sea.

successor or to Thomas Bawa. The only ones under this banner have been very successful in disposing of the various properties which came into their possession. They have now sold by private sale the greater portion of those which remained unsold at the public sale. *Company of Sandwich Bakery* has been sold to Mr. Dickson, of the firm Dwyer and Dickson, of Alameda, for \$33,000. The two dwelling-houses, with the property on the north side of Bridge-street, to Mr. Wilson, manager, for 13,000. *Twend Hamon*, to Mr. Mandell, of London, at a sale, including Mrs. Wilson's life interest in the property, equivalent to \$350. *Lowmfield property* in Eastgate, to Mr. George Robinson, manager, for \$1,100. We are glad to remark that the above properties have been sold at their price. The only property now unsold are the *Ironworks*, about, and 100 shares of the *Shipping Company*. *Williamson* will soon be offered for sale in November.—*Forward again.*

FRENCH INVENTIONS—FORMATION OF COMPANIES.

The French are certainly the most inventive people on earth, but it seldom happens that they bring their schemes to successful maturity. Amongst the extraordinary things recently announced was a substitute for gas, called liquid hydrogen, which was to cost only half as much for an equal portion of light. A company was formed before the merits of the discovery could be tested, and now the shareholders find that the cost of their liquid is twice that of coal gas. The company, therefore, is all but dissolved.—Another association, however, has been formed for the same object, and it is announced that the liquid, in this case, will be two-thirds cheaper than gas. This will probably also be smoke, although it is probable that we shall see very little in the way of light. Two years ago a man announced that he had discovered the means of fixing the electric light, of any size, within the circumference of three feet, and, gravely proposing to light Paris at night by about half a dozen artificial suns. Wild as the scheme was, he found a few moneyed persons to back him on some expensive experiments, and it is still pretended that he will succeed; so that Paris, with half a dozen large electrical machines, will no longer stand in need of candles, oil lamps, or gas.—This is almost as grand an affair as that of the Venetian, some years ago, who pretended that he had discovered the means of absorbing the sun's rays during the day, and bottling them up for use at night.—There is another wild scheme on the tapis, for which attempts are making to get up a company. Charcoal having become excessively dear, it is proposed to collect all the vegetable refuse of the capital, and to carbonise the liguorous portion, so as to produce charcoal. The projectors calculate that this refuse is more than sufficient for the supply of the whole of the charcoal required for the capital, and the cost of which amounts to no less a sum than 12,000,000*fr.* annually. That charcoal can be produced from refuse, such as potato-peel, cabbage-stalks, &c., there is no doubt; for Mr. Raspail, the eminent chemist, who has been employed by the projectors, has obtained some very good specimens; but the wisacres have, in their estimates, overlooked one important fact. They propose to obtain their materials from the *chiffonniers*, who twice a day go through the streets of Paris, raking in all the heaps of refuse in the streets for rags, old paper, and bones. They are to put into their baskets the refuse required by the company. This they can do, but it would require ten loads to each *chiffonnier* for every one that he has now to carry; and the expense of carriage would amount to more than the worth of the article. The artificial charcoal will, therefore, also end in smoke.

REGULATIONS OF RAILWAYS.

is the Act which was passed during the last session of Parliament, are two important provisions (the 15th and 17th), giving compulsory powers of taking lands where the Board of Trade should consider the same necessary for the safety of the public, and for increasing the power over servants of the companies in case of misconduct. By the 15th section it is declared—"And whereas by various Acts relating to railways, compulsory powers are given to railway companies of purchasing and taking lands for the construction of such railways, and it is provided that such compulsory powers shall not be exercised after the expiration of certain limited periods from the passing of such Acts; and whereas it is sometimes found necessary for the public safety that additional land should be taken after the expiration of such periods, for the purpose of giving increased width to the embankments and inclinations to the slopes of railways, or for making approaches to bridges or archways, or for doing such works for the repair or prevention of accidents as are hereinafter described; be it therefore enacted, that in every case in which the lords of the said committee (Board of Trade) shall certify that the public safety requires additional land to be taken by any railway company, for such purpose as aforesaid, the compulsory powers of purchasing and taking land in the Act or Acts of such railway company, together with all the clauses and provisions relative thereto, shall, as regards such portion or portions of land as are mentioned in the certificate of the lords of the said committee, revive and be in full force for any such further period as shall be mentioned in such certificate. Provided always that any railway company applying to the lords of the said committee shall give fourteen days' notice in writing, in the manner prescribed by the Act or Acts of such company, for serving notices on landowners of their intention to make such application to all the parties interested in such lands, or each of them as shall be known to the company, and shall state in such notice the particulars of the lands required; and if any of such parties interested shall apply within the said period of fourteen days to the lords of the said committee, such party shall be heard by them before any such certificate is given. Provided also that where any such application shall have been made by any railway company to the lords of the said committee, upon which application any such certificate shall have been refused, the directors of such railway company shall, if required by the lords of the said committee, repay to the party resisting such application any expenses which he or they may have incurred in resisting such application." The other provision is very comprehensive, and under which any engine-driver, or any other person, may be seized who shall be found drunk on the railway, "or who shall wilfully, maliciously, or negligently do, or omit to do, any act whereby the life or limb of any person passing along, or being upon such railway, or the works thereof respectively, shall or might be injured or endangered; or whereby the passage of any engines, carriages, or trains shall be or might be obstructed or impeded." The penalty for all such conduct is two months' imprisonment, or any fine not exceeding 10*l*.

PREVENTION OF ACCIDENTS ON RAILWAYS.—A paper by M. Hsuu, of first, on the means of preventing accidents on railways by the breaking of an axle-tree, was read at the Academy of Sciences, on the 12th instant, and which was accompanied by a model, showing, with great simplicity, but conclusively, the value of the invention, which consists in such a modification of the wheels of the locomotive, that if the axle should break the wheel itself becomes an axle, and prevents any further accident. M. Hsuu has also invented a break, which, in the event of accident to a locomotive, would act simultaneously upon the wheels of all the carriages of the train. Already, since the melancholy catastrophe on the Versailles Railway, at least twenty inventions of breaks, having the same object as that of M. Hsuu, have been communicated to the Academy, or been otherwise announced, but up to the present moment it does not appear that either has obtained the unqualified approbation of the practical men of science, whose opinion on such a subject is entitled to weight.

ELECTRO-MAGNETIC LOCOMOTIVE.—Under the patronage of the directors of the Edinburgh and Glasgow Railway Company, Mr. Davidson, philosophical instrument maker, has been employed in a series of extensive experiments as to the practicability of applying electro-magnetism for propelling trains along the line of a railway. The experiments having succeeded so far, a machine containing six powerful batteries, huge magnetic coils, and three large magnets fastened on each of two revolving cylinders, through which pass the axes of the driving-wheels, has been constructed; and, on Saturday last, its motive capabilities were tested in one of the carriage sheds belonging to the railway company, in presence of several of the directors. The ponderous machine, weighing between five and six tons, was instantly set in motion on the immersion of the metallic plates into the troughs containing a solution of sulphuric acid. One curious phenomenon connected with the motion of this new and ingenious instrument, was the extent and brilliancy of the repeated electric flashes which accompanied the action of the machinery. The motion produced, though not rapid, was such as clearly to establish the principle that this sort is adapted to the purpose of locomotion; and it is only justice to the inventor to add, that he expressed himself sanguine as to his being able to solve many of the difficulties which yet stand in the way of its being adopted in lieu of the steam-locomotives now in use. All present expressed themselves satisfied with the results of this, the first experiment ever the subject on a large scale. —*Edinburgh Witness.*

JEFFERY'S CEMENT.—EXPERIMENTS AT WOODWICH.—A great number of military and other gentlemen assembled in the marshes, a few days since, to witness experiments with concussion shells invented by Captain Jeffery, and a conical block of wood, about five feet long, and two feet six inches broad, formed of two pieces about fifteen inches square, joined by cement, the invention of Mr. Jeffery. There were nineteen shells fired on Captain Norton's principle; nine of these, being of eight inches in diameter, were fired from a 68-pounder gun at 400 yards' range, and were constructed with leaden fuses. Five of these shells answered remarkably well, but four did not burst. The other ten shells (32-pounders) are constructed with wooden fuses, and nine out of that number burst on striking the bulk-head; the other did not burst. The block of wood, called by Mr. Jeffery, was bored to the centre, exactly in the middle of a joining, and a 5½ inch shell inserted, for the purpose of tearing it to pieces. On a part of the shell being ignited, the shell soon exploded, tearing the bulk-head in all directions and into numerous fragments, but in no part penetrating the pieces where the joining with the cement was made. It has on ample evidence by the experiments which have taken place, that the wooden fuses of Captain Norton have been unsuccessful, and the experiment Mr. Jeffery has fully established the value of his invention, as it confirms the important advantage of being insoluble in water. Mr. Jeffery did not use the fragments showing the joining preserved, to submit it to the two Commissioners of the Admiralty, by whose desire the experiment took place.

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A court of aldermen was held, on Thursday last, at which the following extraordinary proceedings took place, some observations on which will be found in another column.—Alderman THOMAS WOOD rose to call the attention of the court to the situation in which he had been placed with reference to private expenses, the substance of which had reached him in a circuitous way, in order to meet any charge against him. He was not aware of any specific charges. All was rumour; and, therefore, as he was not able to meet any accusations specifically, because nothing made itself tangible, he proposed to put into the hands of each of the aldermen a copy of Lord Denman's judgment, on an investigation of the whole facts, with an extract from the affidavit, explanatory of one part to which allusion had been made. He had thought of publishing the whole of the affidavits on both sides, but their length was so great [here the alderman held up an immense pile of papers as the affidavits] that he believed, and was advised, that it would be quite hopeless to tax the court with so voluminous a document. He would, however, deposit the papers in court, and there, or in private, answer any questions, or meet any charge which could be made, aware that he had been exposed in all directions, and, he must say, most grossly persecuted. The alderman then delivered the following:—

Queen's Bench, Westminster-Hall, May 10.

RE PATTY CHAPPELOW IN RE WOOD—JUDGMENT.

Lord DENMAN—An application was made last term to compel Mr. Wood, an attorney, to deliver up papers to three persons presenting the rule, and also to an answer of the rule, which was made to charge fraud and malversation in his professional conduct. That part of the rule which requires the delivery of papers was not pressed; in the argument it was sought to be modified, so as to enable parties to make a defence in some proceedings against them, but we find no sufficient grounds for making this part of the rule absolute in any extent or in any form. The complaint originates in a concern called the Talacre Mining Company which came into existence about the beginning of 1833, and found itself greatly embarrassed, if not insolvent, in less than two years. Its misdoings are attributed on the one side to the non-payment of calls by the shareholders, on the other to the extreme impudence in many, and to frauds and misdeeds charged against others. It is said that Mr. Wood, who was one of the first persons who joined, and enjoyed great power, which he is charged with abusing, to the loss of the prosecutors, and for the sake of gain to himself. He was one of the original projectors of the undertaking, one of three trustees to whom the property was conveyed, a director as soon as the company was formed; he was also nominated as the permanent chairman of the company, which derived much of its influence from his name and character as an alderman and one of the sheriffs of London; he was at the same time, with his partner, and in that partner's name, the solicitor to the company; in this last character alone he is brought before the court. The charges against him appear in a letter from Mr. Ashurst, the attorney for the prosecutors of the rule, and are three of the misdoings of this company. He is there said to have—1. secretly purchased the shares of the company, and the property, by advising other directors, especially Mr. Chappelow, to sign notes for the purchase money, while he himself declined to do so, on pretence of his being in a partnership; in passing off as the produce of the Talacre Mine, which turned out of very inferior quality, better coals, which came from the Bryn Mine; and in vaunting the excellence of that produced from their pits, and publicly asserting that it was both valuable and popular, when he knew that all the cargoes had been rejected as worthless and unsaleable. In the argument at the bar, the first charge took a more detailed form, as Mr. Wood had, in conjunction with others, secretly purchased the properties very low, and afterwards, as the legal adviser of the company, had induced them to purchase the same at a high price. 2. He is there said to have—2. It was not denied that on this transfer the vendors to the company made what appears on the face of it to be an advantageous bargain for themselves, but recollect, that to Mr. Wood it was less so than it would appear to be on the affidavits, as he constantly refused, as he declares, to take the shares which form part of the price of these coal fields, though promised to do so repeatedly, and although, certainly, some of the vendors kept them for their own use, this part of the case is left in some obscurity; but Mr. Wood denies all fraud in making this bargain, and shows that it was conducted throughout with the knowledge and approbation of the directors and the company. Mr. Chappelow, in particular, the most prominent among the prosecutors, was himself in office in more than one capacity—broker, auditor of the accounts, and secretary of the company, and he was, in the bargain, voluntarily becoming a director at a late period, leaving his friends likewise to join the company, and take a part in its affairs. The affidavits runs into great length in support of the rule. Mr. Wood's, the only one in opposition to it, is much longer. Some of the imputations it distinctly denies; some it explains, and on other points it reanimates on its accusers.

If the court were to assume that friends had been practised by Mr Wood on the company, or on the individual proprietors, or on the public, we should still have to inquire whether this was done in the character of attorney before we could exercise a criminal jurisdiction in this summary method, and we may say in general that the opportunity of information possessed by all these individuals, and the actual acquaintance and concurrence with all that was in progress on the part of Mr. Slaughter, preclude the possibility of any such charge being sustained in regard to soliciting for the company. Whether Mr. Wood's journeys to Dublin and other places, to promote the interests of the company, and the statements made by him, can properly find place in an attorney's bill, or whether the explanations of those statements contained in his affidavit be satisfactory, we are not inquiring. In this long history there is no concealment or deception practised by the attorney on his clients; the rule must, therefore, be discharged. We should be loath to discharge it with a single fact—it is aware that in February, 1837, Mr. Wood's office was at the Levenson's, and that the Levensons advised Mr. Wood and others on their covenant with him for a large part of 18,000*l*. Wood introduced the subject, and led Chappelow and Taylor, as they went, to believe that this debt was due from the company, and urged them to sign notes for the payment of the reduced sum of 13,000*l*., agreed to be accepted by Levenson; the form of note was settled by Mr. Wood. Chappelow himself made himself liable to 10,500*l*., and Mr. Wood, when some were handed him to sign, observed that he must not, by signing, be taken to be a partner in the company, but that he was signing as a creditor, Wood acting as his attorney, and is now in prison by virtue of a judgment. On this matter Mr. Wood denies that he introduced the subject, or gave the form of note, or acted as attorney for the company, a Mr. Slaughter having previously been retained to do that business. He says, also, that he took no other part than as chairman, seeing the proceedings faithfully recorded; but he does not deny that when Levenson was using him personally for a legal debt he presided at a meeting, when it was resolved that the debt should be paid by the notes of the company, and that he was not to have any share as a legal debt or creditor, and certainly were not sued for any, nor that he himself refused to sign such notes when handed to him. It is not easy to understand how he could divert himself of the character of solicitor for the company for that special occasion. Mr. Slaughter was, indeed, called in, but not adversely to Mr. Wood, and he makes no affidavit. At the public meeting held immediately before, it had been assumed that the company was considerably overcharged for the works purchased, and that Levenson's claims were open for investigation, and that the Levensons had agreed to take a reduction of 10,000*l*. on interest, but that Mr. Wood has no right to complain of the rule being moved for by others, who have suffered by following his advice at a time when he was solicitor to the company, and they were called upon to pay as members of the same company. We, therefore, think that the rule must be discharged without costs.

EXTRACT FROM MR. WOOD'S AFFIDAVIT AS TO THE SETTLEMENT ALLIED TO IN THE JUDGMENT.

10. That a statement of the proceedings of the extraordinary general meeting was printed and circulated according to a resolution of the said meeting, and the said report marked No. 5 is one of the papers so printed and circulated.

the paper marked K's use of the paper in printed and otherwise.

Smith, then present to the said meeting in February, 1847, this document was then read with regard to the said contract, for the payment of the said sum of \$1000. Part of the said sum of \$1000, secured to be paid to the said Lewis Leveson by the said order of the 10th of November, 1839, and that such fact was made known to the general meeting before the said resolutions on any of them had been agreed to, and reported, and that immediately after the said last meeting at the George and Valters, the said William Chapman, not wishing to return to the office of the secretary, whose conduct he was impeaching, took to incur the expense of meetings at the George and Valters, agreed to hold a meeting at this deponent's office in furtherance, Greenwich street, where the subject of this document was introduced, and by this deponent only, by a sister partner, and that the said Chapman, as well as others, having been invited, were introduced by the said William Chapman and others to introduce and procure a settlement with Mr. Leveson, had already on foregoing the matter, and had had several interviews with the said Mr. Leveson and his solicitor.

Smith, then the said Mr. Slaughter having agreed upon terms of settlement, attended the said meeting on behalf of this document's offer, and reported the terms of the agreement, and stated that he had prevailed on Mr. Levison to call Jones, and take only 15,000. Instead of his original demand of 25,000, he being paid his out-of-pocket and costs, and that Mr. Levison was with him called by the said out-of-pocket to complete the arrangement; and when the whole matter was finally settled, the said George Taylor himself gave the secretary the money in pursuance of the above agreement, and the said out-of-pocket was then paid the balance of 15,000 in a separate bank of the said company, so taken away by the said William Chappelow, and which, as this document believes, is now in his possession or under his control.

fact, that the said Mr. Blougher acted in the writing for the said company by the appointment of the said William Chapman and others as directors, and to the best of this document's recollection and belief, the said Mr. Blougher then advised the said directors, that, in his opinion, Mr. Levenson's conduct could not be compelled, and stated that he thought Mr. Levenson was entitled to all he claimed, or words to that effect.

[illegible]

Decision That the system were utilized or approved of by him; but he says there were no further suggestions as part of the settlement, in which those suggested and most adverse, except to use the facts and circumstances presented, and that he then suggested nothing against such bill, well because he was anxious to let it go.

And testimony was given in partnership, which he maintained a sufficient reason to allow him to discuss existing bills.

Alderman WILSON requested to be informed whether the Talacre Mining Company, of which Alderman Thomas Wood was chairman and secretary, was not \$9,000 in debt?—Alderman T. WOOD—By no means.

Ald. WILSON as it had been stated to him only that the Talaceo Coal Mining Company was \$2,000. In debt, but that Mr. Chappelow, who was the only man of property connected with the direction of the concern, had become bankrupt in consequence of the connection, and that the liabilities fell upon Ald. Thomas Wood.—Ald. T. WOOD said it was erroneous to say there was but one man of property amongst the directors, or that the liabilities were of a serious nature. Arrangements of a satisfactory kind had been made with respect to the transactions in the company, and he courted inquiry, and was ready to answer any specific charge.

Ald. COPLAND said he should exercise the utmost candour on the subject. It struck him forcibly that any gentleman who expected to fill the chair of the city of London should be free from the apprehension of being made amenable to the bankrupt laws. If a magistrate were amenable to those laws a grave question would arise as to whether the allowance to the Lord Mayor did not become as a vested right.

Ald. T. WOOD repeated that his liabilities were of no importance, and that all the accusations amounted to nothing more than hearsay.

Ald. COPELAND observed that, in the event of the exercise of any power possessed by creditors, if a Lord Mayor becomes bankrupt, the corporation might find themselves plunged into inextricable litigation. The court should, he thought, be well informed upon that point before the day of the election of the chief magistrate.

Ald. WILSON said the information he had received was contained in the paper called the *Mining Journal*, which contained such charges against Ald. T. Wood, as, if they were without foundation, called for the severest punishment. In addition to that information, he had seen a report, drawn up by a member of the corporation, of whose veracity he had never heard any question, and describing conduct which certainly could not be called honest. That report stated that Ald. T. Wood had produced coals as the produce of the Tulare Mine, which coals had been conveyed from a mine of a very different quality. Now, the court of aldermen must require explanations of such charges. A pamphlet, too, had appeared, containing more broad assertions than those contained in the *Mining Journal*, so that a man with an atom of spirit would at once have resorted such accusations if they were founded in error or malignity. It was stated that the only solvent man amongst the directors had been ruined.—Ald. T. WOOD.—It is wrong to say there was but one solvent man amongst the directors.—Ald. WILSON declared that it was positively asserted that the person he alluded to, having become a bankrupt, got rid of the 30,000*l.* liabilities, which thereafter devolved upon Ald. Thomas Wood. Now, if Ald. Thomas Wood had traded in coals, he certainly became liable to the bankrupt laws; but if he did not become liable, it was not an atom the more honorable in him to shelter himself under his profession. It was the duty of every person who sought such an office as that of chief magistrate to clear away any imputation against him. The paper put into his hand, as the judgment of Lord Denman, conveyed in his (Alderman Wilson's) opinion, a heavy censure, instead of exonerated.—Ald. T. WOOD said the whole of the charges, from beginning to end, had been most satisfactorily refuted by the affidavit put into court, with the exception of one part, which he was prepared to account for to the full satisfaction of those who would undertake an investigation.

Ab'l. FARBERBROTHER stated that, as soon as he saw the *Mining Journal*, he asked Ab'l. T. Wood whether he did not intend to proceed against that paper for information, and declared that he (Ab'l. Farberbrother) would do so if it were his case.—Ab'l. T. Wood said he certainly had prepared legal documents for the purpose of proceeding. He, however, upon consulting his friends as to the propriety and expediency of adopting such a course, and he was strongly recommended by them not to take legal proceedings, but to meet any charges which might be brought against him honorably before the court. He felt bound to act upon such advice.

Mr. Ald. Brown says he would be most desirous that, as a body, the court should act in unity. There was, however, a matter of more importance by which they must be guided. It was indisputably necessary that a gentleman should be selected to fill the high office of Lord Mayor should also be the best of everything stated to his prejudice. He did not mean the trivial little tattle which bounded against public men—he meant, that when grave charges were made from the judgment-seat, he could not think of compromising his sense of duty by selecting the man who did not prove himself, under such circumstances, as the more proper of the two returned to the court as eligible candidates. He (Mr. Ald. Brown) would ask whether it would not be better for Ald. T. Wood to retire for the present year, in order to afford a proper opportunity of investigating the whole affair.

Sir PETER LAURIE suggested the course of submitting the case for inquiry to a committee.

Ald. Wilson decided that he had advised Ald. T. Wood to have the case referred to a committee in June last, but the proposition was declined. He had done his duty as a member of the court; he could not think of voting for man as chief magistrate with such a judgment as that of Lord Denham over him. The office must be maintained in honour, and splendour, and hospitality. The allowance from the funds of the corporation was not sufficient to support it with becoming dignity, and a Lord Mayor ought to have priority to enable him to supply the deficiency. Now, Ald. T. Wood said, when was candidate for the office of city solicitor, a few years ago, that all the property he had derived from his profession, and that he was not worth a hundred pounds in the world beyond the produce of his business.

Ald. T. Wood said he did not recollect that anything of the kind had said. Whatever might be the opinion entertained by Ald. Witten as to an indispensable ingredient of wealth in the composition of a Lord Mayor, (Ald. T. Wood) had been elected alderman of his Ward after having been previously applied to on the subject; and he believed he had given satisfaction as a magistrate. He had received the thanks of his fellow-citizens, for his conduct in the shrewdly. As for all that had been said about bankruptcy, the suspicion of such an event existed but in the imagination of those he alluded to it. He must declare that a more persecuted man, or one who deserved persecution, did not exist. He had been advised not to proceed against the paper which maligned him, and he was sure the advice was sound.

Mr. PETER LAURITSEN moved that the report should go into committee on Saturday, or Monday, on the subject.—Ald. T. WOOD approved of the motion, and said he should submit all the papers to the committee. He was determined to have inquiry, and had never refused to give all the information in his power, and never would refuse to answer any questions.—The motion was then put and negatived, four hands having been held up for it, and five against it.—The matter remains for future discussion.

TALACRE COAL AND IRON COMPANY.

IN RE WILLIAM CHAPPELLOW.—This case, which was adjourned by Mr. Commissioner Fane two months since, and again brought forward to-day, excited a great deal of interest, and the court was very full, its having been expected that some disclosures would have been made relative to Mr. Alderman Thomas Wood's connection with the bankrupt (who had retired himself following the advice of the worthy Alderman, acting as solicitor of the company), through the Talbot Coal and Iron Company, which coal was sold to him as to the honesty and faithfulness of the worthy alderman's court, while acting in the strictest capacity of director, chairman, solicitor, adviser, vendor, and purchaser of the property of the company.

Mr. JAMES, on behalf of the assignee, objected to the bill on the ground, it giving place to the discussion of partnership between Chapin and his son, which took place in the present year, about five months ago.—Mr. AUSTIN, for the bankrupt, said that all had been rendered their. Commissioner Fane had ordered, which he thought quite sufficient.—Mr. JAMES denied that Mr. Fane had only reviewed the accounts since the resolution. He had stated that the bankrupt's accounts were only to show his own affairs, and not to meddle with those of the Talbair Coal and Iron company. The long narrative handed to Mr. Fane had nothing to do with the bankrupt's affairs. Mr. Chapin had, when in partnership with his son, done as capital; the assignee only wanted to know what had become that money. Mr. Howard, for whom he appeared, had nothing to do with the Talbair Coal and Iron Company.—Mr. AUSTIN said Mr. Howard had done with the company, for he disengaged the bills only to enable Chapin to prosecute against Baker, on account of his partnership, not being able to do it himself. The fact was very plain, he, and having sufficient money, Mr. Howard paid Baker part of the sum, he making over an account to him, which was mortgaged to the extent of interest, he underwriting to pay off the mortgage.—Mr. Commissioner MERRILL said, in consequence of Mr. Fane's avowal of the effects of the bankrupt, and how the bankrupt stood with the company, he should adjourn the meeting until Mr. Fane returned, papers might be so provided in the meanwhile.—Mr. AUSTIN had no objection that proceeding, but he should abide by the present accounts, and, if any new should arise to make any addition, such addition should be accepted to come within the time given in the certificate of the court.—Mr. Howard offered to prove a debt on contract of a bill signed by Chapin, Mr. Fane, and Davis, which was ordered, as some objections being made by Mr. AUSTIN to the grant, to stand over until Mr. Fane's return.—Mr. AUSTIN recommended Mr. Merridge to sue the patent holder.—Mr. AUSTIN, on behalf of the assignee, objected to the bankruptcy Court to prove, if he liked it better, Mr. Davis could be met with, and that gentleman equally solvent with the other.—This advice caused some confusion, rather discommodated Mr. Merridge.—The next meeting was then fixed for this afternoon.

The following observations are deduced by statements contained in an article entitled "Scriptural Geology," published in one of the Quarterly Reviews, and on which we intend founding a series of papers, to appear in consecutive Numbers of the Journal:—"I have found at Weymouth masses of agglutinated sea-wood, in the different stages of compaction, so exactly resembling slate in their appearance, more particularly the most perfect specimens, that the conjecture seems almost inevitable that these woods are the material of slate formations. The one specimen is sufficiently soft, so as by delamination to allow its plates to be separated into layers of compressed sea-wood; the other specimen (so closely compacted as to be almost inseparable, and in appearance very like *paper marble*) resembles so much the first, and has become so exactly like common slate in its appearance and fracture, that there is little doubt but that it is the intermediate stage of induration of the wood between the former specimen and slate itself. Having some years ago noticed these facts, I have had my attention called to appearances in the structure of slates; and in Westmoreland I noticed large slabs of slate, of the kind used for tiling, though of the coarser description, in which I perceived a sort of bulging (inequalities, having a branching structure which, to my unsophisticated eye, had all the appearance of compressed stalks. In one of those slabs there was a round stone, and the grain of the slate united itself to it, just like the curved deviations in the fibres of the grain occasioned by the knots in deal boards, or like the edges of the leaves of a book close pressed, in which a round pencil has been placed. The waving direction of the laminae of the slate, which was large, was influenced from one end to the other by this obstruction to their regularity. This fact, which cannot be uncommon, seemed to prove that the laminae of slate could not be of any kind of granular or clay-like formation. But probably a close microscopic inspection will prove what the structure actually is, if observations similar to the above are not deemed conclusive. The singular variety of fracture which belongs to the different kinds of slates may appear opposed to the idea that they are of the origin here indicated; yet, if inquiry should detect that this property is attributable more probably to the different direction of the pressure to which they have been subject, rather than to any chemical cause (though such may, however, be yet present), this difficulty could not oppose the conjecture as to the origin of slates, which such facts could seem to lend to."

LONDON ELECTRICAL SOCIETY.

the society met on Wednesday evening, the 30th inst., at No. 3, Caswell-street. "The papers read were—1. "Observations by Mr. Weeks Relative to the History of the *Aspid Crustacea*." He has observed that these extraordinary creatures propagate their species by the usual process of generation. It has been seen, time after time become extinct, the survivors feeding on the bodies of the defunct, leaving legs and other exuviae. In opening the opercula, with the view of obtaining specimens before the whole family became extinct, he was disappointed—only one insect, and that was hurt, was seen. He anticipates that the fluorescent deposits around the platinum anodes may prove to be an inferior oxide of silicon, and may lead to determining the exact question of the atomic weight of this element.—2. "Observations by Dr. Snow Harris upon Mr. Walker's papers on Lightning Conductors." Our readers are aware that Mr. Walker has recommended vietal metallic wires to be connected with the lightning conductors, in order to prevent the possibility of a spark passing between them. Mr. Harris denies the necessity of this, and exercises it to be useless. He says that the charge may pass from an inefficient conductor to unisolated metals, but not to semi-insulators. He examines the experiments given by Mr. Walker in illustration of his views, and marks the points in which he differs. He affirms the *distinction*, but not the *difference*, between a Leyden discharge and a flash of lightning, and, differing from Mr. Walker, he prefers the Leyden to the prime conductor experiments. The difference between the two discharges he considers to be mere a matter of intensity, then due, as Mr. Walker believes, the direction of the discharge, and gives instances of *side-circuits* in Nature. We cannot attempt to enter into Mr. Harris's argument without the aid of diagrams; we should neither do justice to him nor to Mr. Walker, whose matter is one of great moment, and needs alternative investigation. The critical result to which these two gentlemen are at variance is, that the one recommends, under certain circumstances, the union of vietal bodies with a conducting-rod, and the other objects to such union as useless. The one offers the flash from a prime conductor in his illustration of lightning—the other a Leyden flash. The paper is ordered to be printed immediately, and within a week will be in the hands of the public, at the same time with Mr. Walker's communication.—Mr. Weekes's "Electro-Metamorphological Magazine" was then laid before the society.

COAL TRADE.

RE-AFFORDING. The gallies have resumed work during the week at one of the pits of the following gentlemen, at the old prices (3s. 6d. per ton) for thin coal; some of them, we understand, are receiving 1s. per ton:—At Messrs. Parsons, Shales, Leicester, Lowe, Fellows, Houghton, Hanks, Hanks, and Bagnall. In the neighbourhood of Wednesbury and Walsworth the principal part of the pits are preparing to commence—some have already begun—to work at 4s. per day for thin coal. A meeting of hers was expected to take place at Walsworth yesterday (Friday) morning; a few of the men assembled, but, after waiting about for a few hours, quietly dispersed again.—*Examiner.*

WATERHURY.—On Friday last the annual meeting of the owners and stevedores employed in the coal trade was held at the Black Lion Inn, Waterbury; a good deal of conversation took place respecting the present unprosperous state of the trade and other matters connected with it, after which the following gentlemen were appointed a committee of management for the ensuing year:—Messrs. W. Miller, W. Gaskell, J. Curwen, T. Farnes, T. Lyon, B. Barwell, W. Curwens, J. M'Minn, T. Cornick, J. Webster, W. Sherwin. A vote of thanks was then given to the last year's committee for their valuable services, and the meeting separated. *Advertiser.*

IRON TRADE.

HUMBER TRUCKS.—On Tuesday last a serious accident occurred to the latest engine at the Rhymney Iron Works, which, we regret to hear, cost a large number of men belonging to that concern to be out of employment for some weeks. We have not heard how the accident took place, the engine has sustained such damage as will take a month to repair. We are happy to add, that there was no injury to life or limb of any of the men. —*Mercury and South Wales.*

YVARTHA IRON WORKS.—The new furnaces set to work on Wednesday. Although no fresh hands can be taken on at present, yet the coming of the workmen already in these extensive works will be materially benefited.—*Ibid.*

January. Fewer.—The reports about this work in the iron districts requiring a change for the better are truly cheering, if correct; I should venture to say that the New Cast Works at Aberystwyth, No. 4, has been in operation for some time. We happen to know that the new plant at Clydach is "off" since Wednesday, and some one will be required at all the levels. Although an address has taken place, yet such a demand for workmen, and full work to those employed already, will very much stir all classes of the community. The sums of labour have suffered greatly in the last twelve months, and it is hoped a new era is dawning upon the province.

UPSTATE—A GRIEVANCE HEARD.—All the miners were called in to the Schuylkill last Wednesday evening, the object being to settle the men's grievances with regard to the payments made by the policy firm. It seems that some of the workmen had been making complaints about the money miners for paying an late in the public-house on Saturday; the principal agents have given notice that no payments are to be made at public-houses in future.—*Dispatch*.

ON THE FUSION OF ANTIMONY IN ARGENTINE ASHS.—M. Wigglesworth, since that time, to keep transparent fragments of arsenious acid and hydrochloric acid, in order to obtain those translucent; he did not succeed. The arsenious acid gradually became tinted and opaque; but hydrochloric acid, decanted and tested, showed a very large quantity of antimony, 50th OP. In many cases it may be important to detect antimony, and in this respect the comminution is not unimportant. The oxide of antimony is sublimed in great part with the arsenious acid. The hydrochloric acid completely dissolves this impure arsenious forming a solution which yields a white precipitate with water, and, with sublimed hydrogen, at first gives a red precipitate of 50th OP arseniophuret of antimony, and then a yellow precipitate of sulphuretted arsenic. Nitric acid dissolves it with that salt of base, leaving a residue of antimony containing arsenous acid, which readily dissolves in sulphuric or tartaric acid, and forms with these acids solutions which not all the reactions of oxide of antimony. M. Wigglesworth says that in the presence of oxide of antimony several kinds of arsenious acids result in it in some of them, especially in the chlorine arsenious acid of Wauquier in the Meats, and not in the others.

NOTICES TO CORRESPONDENTS.

"A. B." (London).—Mr. John Budge's *New's Guide* has long been out of print, but it is now in contemplation, we believe, to publish a new edition. For any further particulars application should be made to the author, at Collington.

"A. B." (York).—Authentic Prices of Railway Stock, together with Weekly Train Returns, are published regularly in the *Mining Journal*; we should be glad if our correspondents could furnish any additional particulars to those in our last page, which would receive ready insertion.

"F. W." (Liverpool).—We are sorry to say we receive too many complaints of a kind nature, that we now acknowledge irregularity in supplying the *Mining Journal*, as we can no longer afford to make the *Mining Journal* regularly published about Two o'clock on Saturday afternoon, at the office, 1, Crane-court, Fleet-street, where it can always be obtained, and there is no cause for irregularity in its supply in towns, other than neglect on the part of the agent through whom it is ordered; but, as respects country subscribers, the blame is shared with the Post-office authorities, who, if they are guilty of one-half the irregularity which is charged upon them, are liable to some way or other to severe punishment.—The Journal can always be had, in Liverpool, of Messrs. Arnold and Sons, or any other respectable agent.

"E. M."—Apply to Messrs. Collinson and Flint, sharebrokers, High street, Hull, who will readily render the information required.

"Once."—We have not heard the result of the trial with the *Bad* at Redcross Mine, but have reason to believe that it will *not* fail now.

THE MINING JOURNAL,
Railway and Commercial Gazette.

LONDON, SEPTEMBER 24, 1842.

It was not our intention to have offered any further observations on the "doings" of Mr. Ald. THOMAS WOOD, and his connection with the nefarious proceedings of the Talacre Coal and Iron Company, until after the 29th inst., having, as we considered, done our duty in exposing the frauds practised, and leaving to the Court of Aldermen, the Court of Common Council, and the Livery of the City of London, to determine on the award which the justice of the case merited. The proceedings in the Court of Aldermen and in the Court of Bankruptcy, reported in our columns, leaves us no option as to the course we should pursue, while the remarks in the *Times* and *Morning Herald* of this day call for notice. It is evidently the object of Mr. Alderman THOMAS WOOD and his friends to avoid meeting the question, and they will, doubtless, use every endeavour so to mystify the real grounds of complaint as to mislead the Livery; but, in a few words, we shall endeavour to place the main points for consideration before them, and leave to "facts and figures" to determine whether we are justified in the language we have applied to Mr. Ald. THOMAS WOOD, and await the decision of the Livery on the 29th inst., to prove whether the opinion we expressed of the unfitness of that gentleman to fill the office of LORD MAYOR of the city of London is in accordance with their own.

The object which we had in view is achieved—the attention of our fellow-citizens has been directed to the charges we have preferred against Mr. Ald. THOMAS WOOD—and nothing but an inquiry into their accuracy can satisfy even the worthy Alderman, who, although he calls himself a persecuted man, knows—aye, as well as we do—that not one word which has appeared in the *Evening Journal* reflecting on his conduct is aught but fact. We feel called upon to justify those remarks, by a brief recapitulation of the charges, but, in so doing, shall treat the subject as tersely as possible, while we have to express our readiness, as well as our power, to prove, before any committee which may be appointed, in any court in which the inquiry may be instituted, that each of the many charges can be fully substantiated.

As evidence of our desire to deal fairly with the worthy Alderman, we applied to that gentleman for a copy of the affidavits filed in his behalf in the Court of Queen's Bench, upon the application of Messrs. CHAPPELLOW, TAYLOR, and HANDISYDE, "to compel Mr. WOOD, an attorney, to deliver up papers to the three persons prosecuting the rule, and also to answer the matters of the affidavits, which are said to charge fraud and malversation in his professional conduct," but with which the worthy alderman declined to furnish us. To avoid mistake, we have here quoted Lord Chief Justice DENMAN's words on pronouncing judgment, in the course of which, it will be remembered, he used the following expressions:—"The whole of this matter appears so suspicious, and, we must add, so incorrect, that Mr. WOOD has no right to complain of the rule being moved for by those who have suffered by allowing his advice at a time when he was solicitor to the company which he himself is a member."

It is unnecessary here to recapitulate the judgment, which is given at length in another column, and, therefore, we proceed to the case on which our observations have been founded.

The Talacre Coal and Iron Company was formed with a nominal capital of 300,000*l.*—thus divided: 3600 proprietors' shares, of 50*l.* each, representing 180,000*l.*; and 20,000 consumers' debentures, of 10*l.* per share, or 200,000*l.*—by Mr. JOHN DAVIS, of West Cork.

seniorly, Messrs. BAKER and LEVASON, Mr. ALDERMAN THOMAS WOOD, Mr. ex-Deputy WESTON, and Aldermen HYNDMAN and DENNIS, of Dublin, with one or two others. The company was formed, the prospectus issued, the shares subscribed, and debentures put up before the property was really in the hands of the projectors, and for which the sum of 110,000*l.* was charged, which sum, the preliminary arrangements made between the respective parties, was to be divided, with a slight deduction, amongst the contributors of the scheme. Mr. Ald. T. WOOD was not only one of the promoters and purchasers of this valueless concern at an exorbitant price, but took upon himself the offices of trustee, chairman, director, and selector—thus precluding the possibility of any disinterestedness as to his guilty knowledge and participation in the fraud.

We believe it to be true, that he did not, in the end, take to his share of the free shares, but he is charged with being a party to the appropriation to himself. We have heard that he had them in his possession when in Dublin—that they were subsequently turned in the hands of Mr. WATSON, jun., the secretary—and only got up when the fraud was detected.

We regret there should be occasion, even thus briefly, to go over these points, but we owe it to ourselves to place before our readers and the Livestock the gravamen of the charge preferred. The tilt of the question on the 19th will best prove whether the opinion at which we have arrived is commendable with those entertained by the body of the Livestock at large. The following letter appeared in the Herald of this morning:—We treat it as a hint, but wish to

give to the worthy Alderman the benefit, if any, he expects from the production, should it be genuine, of which, however, as we observed, we have our doubts.—

Sir,—The unjust & irrelevant remarks which have gained such ground against me are of the highest moment necessary to be corrected, and I have to request your kind insertion of this letter to say that every paper connected with the ill-fated Liberator is now in the hands of Mr. C. H. Chapman, who will, I am assured, do every thing in his power to clear up the matter. The Court of Aldermen have negatived an inquiry, I am thus thrown on the liberty to say whether I am to lose my station, my character, and all that is dear, or whether I am to occupy the position of a private individual. I am, Sir, prepared, Mr. Acher, is prepared, to answer every question which you please and in full.

Yours truly,
THOMAS WOOD.

Concert Court, Sep. 23.

The following observations, bearing on the subject, appeared in our columns of the 14th of May last :—

The hearing of counsel to show cause why the rule obtained for the production of certain papers connected with the Talacore Coal and Iron Company, detained by Mr. Aid. Thomas Wood, in his capacity as solicitor of the company—as also to answer certain allegations, on which were grounded an application to the court, having for its object the striding the worthy alderman of the hells as a solicitor—should be deferred until the next day, was granted, and the court (in the absence of the counsel) will be found in our columns of to-day, and which we give as fully as possible, in consideration of Mr. Aid. Thos. Wood's threatened proceedings against us for exposing abuses, and developing the truth. It was our intention to have given the substance, or an abstract of the affidavits put in on both sides, but Mr. Aid. Thomas Wood having declined to furnish us with any of the affidavits, and by him, which, in our opinion, would have been of great service to the public, and which would have been necessary to recapitulate the statements which have already appeared. A careful perusal of the report referred to, must, however, convince the shareholders, and every impartial reader, that a gross fraud has been practised, and that Mr. Aid. Thomas Wood has lent himself to the fraud. It is satisfactory to find that the opinion we expressed in our issue of the 10th inst. is correct, and that the course we have pursued is warranted. Judges who presided on the rule being granted, and also that of the Solicitor General (the advocate for Aid. Wood) who distinctly express their opinion, that, if the allegations be true (and such they are), then that there are grounds for an indictment for conspiracy. This was the opinion we first entertained and expressed, and we regret that the parties, who were named, did not act up to our commendations, and we fully enter into the report of the court, and to require further counsel of record, which we reserve until the judgment is given.

"There's danger in the mines, old man," I exclaimed to a miner, who, with his arms bent, leaning against the sides of the immense vault, absorbed a meditation—"It must be a frightful life." The old man looked with a steadfast, but somewhat vacant, stare, and then, in half-broken sentences, he muttered, "danger—where is there not danger—on the earth or beneath it—on the mountain or in the valley—on the ocean or in the quiet of Nature's most hidden spots—where hath not death left some token of his presence?"

"Truly," I replied, "but the vicissitudes of life are various—the sailor seeks his living on the waters, and he knew each moment that they might engulf him—the hunter seeks death in the wild woods—the soldier in the field of battle—and the miner knows not but that the spot where he now stands to-morrow may be his tomb."—"It is so, indeed," replied the old man, "we and death in the means we seek to perpetuate life—it is a strange riddle, who shall solve it?"—"Have you long followed this occupation?" I asked, somewhat struck with the old man's manner.—"From a boy—I drew my first breath in the mines—I shall yield it up in their gloom."—"You have seen some of these vicissitudes," I said, "to which you just now alluded."—"Yes," he replied, with a faltering voice, "I have. There was a time when three small boys looked up to me, and called me father; they were sturdy triplings. Now, it seems but yesterday they stood before me in the pride of their strength, and I filled, too, with a father's vanity! But the Lord chasteneth the proud heart—where are they now? I saw the youngest—he was the dearest of the flock—his mother's spirit seemed to have settled on him—rushed at my feet, a bleeding mass; we were together—so near that his hot blood sprang up into my face. Molten lead had been more lasting than these awful drops. One moment, and his light laugh was in my ears—the next, and the large mass came; there was no cry of terror, but transition to eternity as was the lightning's flash—and my poor boy lay crushed beneath the awful load. It was an awful moment! but time, that changeth all things, brought relief, and I still had two sons. But my cup of affliction was not yet full—they, too, were taken from me. Side by side they died—not as their father, but the 'fire-damp' snatched their breath; and left them scorched and lifeless. They brought them home to the old man; his jewels—than whom earth's richest treasures in his sight had no price—and told him he was childless and alone. It is a strange decree that the old plant should thus arrive the strippling things we shaded, and for whom it would have died a thousand times. Is it surprising that I should wish to die here in the mines?"

"You have, indeed," I replied, "drunk of affliction—whence do you derive consolation?"—"The old man looked up—"from Heaven; God gave, and he taketh away, blessed be his name."—I bowed my head to the miner's own prayer, and the old man passed on.

JOINT-STOCK BANKING COMPANIES.—During the last Session an Act was passed making perpetual two former Acts respecting the rights of members of joint-stock banking companies adopting proceedings against shareholders, and by members against the companies with whom they are associated. The former Acts were found necessary after the constitution of so many companies in this country; and the Legislature has resolved making the power therein given a perpetual law. A partner in a joint-stock banking company can now be sued at law, and can, notwithstanding partnership as a shareholder, proceed against the company with which he is connected.

QUICKSILVER MINES OF ALMADEN.—M. Salamanca left Paris for Madrid on Monday night, instead of continuing his journey to London as he supposed, to form an association of capitalists to compete with the house of Rothschild in bidding for the Almaden quicksilver mines, the contract for which with that house will expire towards the latter end of 1843. We are now informed, that through the agency of M. Carasso the funds necessary for that purpose will be advanced by the ex-Queen Regent Christina; that, in fact, there are other associations in progress to contend with the house. Notwithstanding the contract in question. It is doubtful, however, we understand, that the mines will be farmed to any parties whatever, as the Spanish Government are said to contemplate holding the mines in their own hands, and thus preserving the command of the South American Republics, to whom the quicksilver of Spain is indispensable for the working of their mines.

GRANBY RAILWAY TRAINS.—During the Queen's visit to Scotland, from anxiety of the people to witness the Royal procession, upwards of 200 were carried in one train on the Slingsman Railway—the train consisted of 110 vehicles, propelled by five engines, four in front and one behind, and the whole extended to the enormous length of a third of a mile. No other train of passengers alone has, *if ever*, been seen on any railway; and when it is considered it had to ascend for a considerable distance at the rate of 1 in 100, and that the line in general is not adapted for a great passenger-trade, it may be said to be one of the greatest feats performed by any railway in the kingdom.—A train of extraordinary length was also lately propelled on the Preston and Wyre Railway, on the occasion of the scholars at the different Sunday schools being treated by teachers and friends; the train consisted of twenty-seven open coaches, drawn by the No. 1 engine, and the total number of persons carried was 2,164.

MAGNETICAL AND METEOROLOGICAL OBSERVATIONS.—The council of the Royal Society have received an intimation, communicated by the *com de Brancow*, of the earnest desire of the Russian Government to prosecute in the magnetical inquiries now carrying on in various parts of the world. The system of these observations is at present in full and co-operation at various stations on the globe; they are carried out at all observatories, established by the governments of this and of other nations. An immense mass of documents relating to terrestrial magnetism and meteorology is in progress of collection. It may also be said, in connection with this subject, that the series of instructions to officers of the expeditions lately sent out to Africa, for conducting magnetic observations, prepared by Lieut.-Col. Sabine, has been adopted by council of the Royal Society, and communicated to the Lords Commissioners of the Admiralty.

[illegible]

19

BY THE REV. W. BUCKLAND, F.G.S., ETC.

REACTIVITY OF WHIRLWINDS.—M. ASHES, in allusion to the opinion expressed by several persons of the electricity of whirlwinds, mentioned, at the meeting of the Academy of Sciences, some observations made by a St. Petersburg storm, on the 24th ult., in the department of the Andes. His gentleman relates that, on the occasion referred to, the iron bars of lanterns, the gutters of sham-iron, the plates of insurance companies, and her metallic objects, were carried away by the whirlwind, thus indicating, speed and dimity, the presence of electricity.

COMPARATIVE POWER OF COAL, &c.—From an extensive series of experiments lately made, it has been ascertained that 1 lb. of Wall's End coal will impart one degree of heat to 20,000 lbs. of water; of Llangrath, to 20,000 lbs.; charcoal, to 10,000 lbs.; and of anthracite, to 12,000

MR. HALL'S SMOKE-CONSUMING APPARATUS

WATER-WHEELS.
TO THE EDITOR OF THE MINING JOURNAL.
SIR,—Perusing your valuable Journal, No. 362, page 244, in which appeared a copy of a publication from Captain Tregaskis, headed "Economic Application of Steam power to the Mining Industry," I have been

TO THE EDITOR OF THE MINING JOURNAL.

The tables close thus:—"19,750 lbs. of water performing a revolution to a forty-six foot over-shot wheel, will work a twelve-inch lift of pumps, 113 fathoms deep, six-foot stroke." Here is something rational—I have met with no other rule to equal it. And now, Mr. Editor, I wish to say, at the close of my letter, that I write for correct information, wishing to have the truth, the whole truth, and nothing but the truth.

Swansea, Sept. 16. H. MENEVENAR.

TO THE EDITOR OF THE MINING JOURNAL.

30, Threadneedle-street, Sept. 20. J. Y. WATSON.

TALACRE COAL AND IRON COMPANY.

TO THE EDITOR OF THE MINING JOURNAL.

Most of your readers know that the directors of this company divided amongst themselves and friends 50,000*l.* in free shares, which very moderate amount they expected the deluded shareholders to pay, or the public to purchase—and, unfortunately, many shares were purchased, so the whole amount of 50*l.* per share paid. To encourage their avarice a per centage seems to have been paid on all shares sold, and a bonus of free shares given; on which shares these men worked as on fictitious capital, affirming to those whom they had, or intended to deceive, that they had themselves embarked as much money in the concern, and, for their own sakes, would look to its safe and profitable investment with all the scrutiny that their own interest and that of their friends demanded, so that were there a chance of failure, or of fraud, they would only be involving themselves in the hazard and the loss. In order more peculiarly to impress the hearer with an idea of their honesty, each of these gentlemen garnished his tale with information as to how he personally had been enabled to purchase so many shares. Mr. W. CHURCH, of 72, Coaling street, Dublin, assured his friends, with much sincerity, and a slight touch of feeling, that his grandmother had died, and left him 1000*l.*, and as great was his confidence, that he had invested it all in the Taurus, and bought twenty paid-up shares. Can anything be more discreditable than this? These deceptions, joined with the acknowledged incorrect accounts

which he was a member, after a patient and impartial hearing, by men no otherwise interested than as honest men, jealous of the credit of their own church, and judging not by the quibbles of the law, but from a common-sense view of the question.

I have read many accounts of the deceptions practised in your great metropolis, but few seem to have concealed their schemes with such *fluency*, or to have carried them out with such an utter disregard of truth—indeed, from the Alderman at the head, to Shoobridge at the tail, they have proved accomplished predators on the fruits of honest industry. They tell me one has saved enough already to be Lord Mayor of London next year—surely this is not true, the citizens of London had want to be a *little* more particular than to have such men as Shoobridge, Weston, or Wood for their chief magistrate.

TO THE EDITOR OF THE MINING JOURNAL

Sta.—The inclosed circular, signed by the solicitors, has been forwarded to me, and by it you may perceive, that, however backward the trustees, Wood, Weston, and Hyndman, are in paying their share of the liabilities they have fastened on the company, they are not backward in requiring the aid of the shareholders when they find themselves involved in the net only intended for others. Of the 60,000*l.* which the defunct shareholders have already paid for putting confidence in Alderman Wood and his co-adjutors, how much has been paid, think you, by the honourable trustees? Why, about 600*l.*, the greater part of which found its way back into the pockets in the shape of law or preliminary expenses, along with the 32,000*l.* of free shares these three gentlemen appropriated to themselves. Have even one of these trustees subscribed so much as a sovereign towards the 33,000*l.* of debt which Alderman Wood declared due last year, or sought to relieve the shareholders in the slightest degree from the difficulties with which they were surrounded? No, they have not touched the burdens with their little finger, and whatever ruin, privation, or sorrow, is endured by the proprietors, the trustees give neither sympathy nor relief. Many are driven from their homes and families—many are paying every farthing they possess to escape personal molestation—some have paid thousands—but they are as far off releaser and quietness as ever. Knowing these things, how can even the solicitors of the trustees have the face to ask a "proportion towards the payment of the rent now due?" Bring your clients, gentlemen, into court with clean hands, we should say; wash them from the guilt of trepanning honest men to their ruin for personal benefit, and then you might expect answers to your circular—as it is, this is the only one you will obtain, and only obtain it through the courtesy of the Editor of the *Mining Journal*. The circular says, "there is no hope of raising money to work the mines with advantage." I find, by reference to the prospectus, that the capital required for working the mines, including 2500*l.* for fifty cottages, &c., and also 7500*l.* for capital for wages, is set down at 36,250*l.* Now, it would seem by the report of September 30, 1841, that 50,000*l.* had been received in cash, and 33,000*l.* of debt had been incurred—making a total of 83,000*l.*, and instead of 51 ten pair of pits, fifty cottages, and the floating capital, that were to have been had for 36,250*l.*, they expended or distributed 83,000*l.*, and have neither pits, cottages, nor floating capital; and then their solicitors, with admirable equanimity, observe, "there is no hope of raising money to work the mines"—they need not have added "with advantage," for AM. Thomas Wood knows that you might as well sink a pit in Corbet-court, Gracechurch-street, in front of his own office, and seek to work that to advantage, as to talk about working Pictou to advantage. The trustees and their fellow-directors took the mines for their own benefit, as their subsequent conduct has sufficiently shown; they bought them for a small amount, they trebled that amount, and divided it among themselves, and they now seek to place the onus of their trusteeship upon the proprietors; however, little chance there is of it being done, the endeavour is in perfect keeping with the chicanery so long practised on the company.

Great Russell-street, Sept. 21.

AGNES.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—I was amused on perusing the "report" in the Times of the Royal Mail Steam-Packet Company's meeting, held last Wednesday, to find that Mr. Joseph Higgins had overcome his modesty and diffidence, and actually moved—"That the meeting should adjourn, in order to give every shareholder an opportunity of reading the report of the directors, with a view to a deliberate discussion."—Now, really, Mr. Editor, this is rich, the said Mr. Joseph Higgins having, in his capacity of chairman of the Southampton Dock Company, repeatedly opposed the same rational course—in fact, having invariably, when questions which he did not like were asked him at the various meetings, given (what the Times called, in their "report" of the last half-yearly meeting, held on the 31st August) "captious answers."

T. R.

700 730 800 830 860 890 920 950 980 1000

Sir,—I regret pressing engagements, previous to an unexpected speedy departure from England, prevent me at present replying to the communication of Dr. Peyronne, inserted in your last week's Journal, the statements contained in which, so far as regards Fulton, I am not at all disposed to admit as correct. My impression (and which I have no doubt of being enabled to prove a correct one) is, that he was able to remain almost an indefinite time under water, without being obliged, as the Dr. asserts, to come up to the surface to replenish the air, in his submarine boat; but, in the absence of the means of obtaining that correct information (and which my time will not allow me to seek here) on which to found a satisfactory answer, I am compelled to postpone a refutation until my arrival in the United States, when I will also attend to the inquiry of "A Subscriber." If it is not trespassing too much on your columns, I should also wish you to allow me space for notes on several other matters recently treated on in your columns.

J. F. C. (of New York).

Temple, Sept. 10.

C. F. Guitard, solitary public, *Strophia* genus, for certain improvements in the cop-

3. **W. B. Nathan, engineer, Jamaica Bureau, Commercial road, for certain improvements in machinery and apparatus for raising, sorting, conveying, and drawing off liquids.**

4. **W. S. Newton, self-engineer, Chancery-lane, for improvements in machinery or apparatus for making or manufacturing screens, sieve blanks, and cloth-lining to screens.**

5. **W. F. Cooke, Esq., Clapham-buildings, for improvements in apparatus for transmitting electricity between distant places, and improvements also for applied amongst other purposes, to apparatus for giving signals and sending telegrams of distant places by means of electric currents.**

6. **F. Threlwell, engine-builder, Low Palling, Thurston, for certain improvements in lubricating the piston-rods of steam engines, and of other machinery.**

7. **W. A. Jones, coal factor, Goods, York, for certain improvements in propelling steam engines.**

8. **W. H. Jones civil engineer, Martin's lane, London, for certain improvements in railways and carriage-wheels, railways and other carriages, and in the mode of propelling the said carriages, parts of which improvements are applicable to the railways of Scotland in other machines.**

9. **J. Parker, Printer, Grosvenor-street, for improvements in Presses.**

10. **C. Fletcher, letterer, Middlemore Street, Grosvenor-street, and T. Thain's son, builder, 10, St. James-street, in the said county, for certain improvements in design or models for the said letterers.**

MINING IN AMERICA.

GEOLOGICAL AND STATISTICAL NOTICE OF THE COAL MINES IN THE VICINITY OF RICHMOND, VA.

By A. S. WOODWARD, Esq., President of the Mid Lothian Mining Company, (Continued from last Journal.)

As to the quality of the Mid Lothian coal, I refer to the samples sent you, and the certificates contained in my circular, also forwarded to you, adding this fact, that this coal, upon trial, has been found to suit a greater variety of purposes than any coal hitherto discovered; and of this you will find ample proof by attentively examining the circular referred to. The whole effective force at these mines, including the coal-yard hands, and top and bottom hands, is 150 men and boys, with some twenty-five mules. Most of these mines will be discontinued as soon as the steam-engines are erected. The ventilation of the mines is committed to the management of a Newcastle miner, or gas man, of much experience and skill, trained by Mr. Buddie, the distinguished English mining engineer. The ventilation is kept up by means of brattice work of boards, and aided by a furnace under ground. The atmospheric air is taken down on one side of the shaft, and courses the whole drift, passing out by the furnace on the opposite side of the shaft. On the upcast side the air is received some thirty feet from the bottom of the pit into the shaft, and at the top it is forced up as far as thirty feet above the mouth of the shaft. Large quantities of inflammable gas are thrown out from the coal in the shaft constantly, and any interruption in the air causes the mines with regularity, slight, and would be attended with disastrous consequences from an explosion of the gas. Mr. Humphrey Davy's lamp is used as the mine, more as a pioneer than otherwise; no mine is considered safe that requires to be worked by safety lamps. They ought to be used only in going through the mine to see that all is right before the mine is put to work; or to be used to free the mine in case they are overcharged with gas.

The interior of the mines contains iron railroads of a very simple construction. Iron bars, two inches by half an inch, are inserted, edge up, into grooves of timber, four by two inches, laid at the bottom of the drifts. The iron is admitted into the timber about an inch deep; no wedging is necessary, and the road can be curved at pleasure. Mules are used on these roads below, and thrive and look better there than those above ground. Impressions of fishes and vegetable remains, such as ferns, bark, and knobs of wood, are often found in the slate lying over coal in this neighbourhood. They were particularly numerous at the Union Pits and mines of the Coker Company, which seem to be a distinct formation of coal from the main formation, and many suppose it a deposit at an after date. As no sinking is now going on at either of these mines, I am unable to procure and forward you any samples, as the old beds have been stripped off. I will be upon the watch, and secure for you whatever may be obtained, and worthy of your attention. The coal basin extends across Chesterfield county to the south to the Appomattox, or perhaps a little beyond the river into Amelia county. No coal, however, has been found of sufficient thickness to justify working nearer than five miles from the river, distant one mile to the north. Between these pits and Hill's old pits, distant five miles still further to the north, is supposed to be the only part of this section of the basin that will be found valuable from the abundance of its mineral treasures. The coal measures may be traced on the north from these limits to the James River Pits, and south a little beyond the Appomattox, but no exploration has yet discovered coal beyond the limits mentioned, in sufficient quantities to be wrought to profit.

Reverend's pits, mentioned above, were some twenty years since leased by a company of gentlemen in Petersburg, wrought for a few years, and abandoned; subsequently an incorporated company purchased them, but, after a trial of two years, gave up further search for coal, having been unsuccessful, though the land is still owned by them. About twenty years ago Hill's pits were first put in operation; these were worked for five or six years, and likewise abandoned. The coal at both of these workings was of excellent quality, and particularly well adapted to the use of grates and other purposes requiring gas and flame. The exceedingly faulty character of the field at both of these points led, no doubt, to the abandonment of these workings. These are the only workings that had been attempted on the south side of the great coal basin, until two years since, when coal was accidentally discovered upon the lands of James H. Cox, near south of Hill's old pits, and three-fourths of a mile distant. This coal was first discovered on the side of a hill, where it had been uncovered by the washings of heavy rains; for the coal here along the whole line of outcrop reaches within a few feet of the surface, being only covered by a coating of soil, sand, and gravel. Since its discovery, an average of about twenty hands have been engaged in exploring and mining it, and, from the explorations already made, the belief is entertained that on part of the basin presents a more regular, uninterrupted, and undisturbed formation than this. The thickness of the seam varies from seven to fifteen feet. The coal is of superior quality, and peculiarly suited to grate purposes, steam-engines, the blast-furnace, gas-works, &c. The accompanying certificate from Dr. Andrews shows its richness in volatile matter, and the small quantity of ashes it contains. At present the operations at these mines cannot be increased to any extent, in consequence of their distance from market, and the want of proper facilities for transportation. The present mode of transportation is to carry it in carts to the river, and thence by boats to Petersburg, at the cost in all of eight and a half cents. This high cost of transportation forbids, for a time, successful competition with mines enjoying greater facilities. It is designed to remedy this inconvenience by constructing a railroad to the Appomattox, a distance of five miles, or one to intersect with the Richmond and Petersburg road, and reach James River somewhere about Osburne's or Bermuda Hundred. The country through which both of these routes would pass is admirably adapted to the purpose, being very level and abounding in timber and other railroad materials. Either of these contemplated improvements would place these mines in a state of fair competition with any other mines in Virginia, or perhaps in this country.

These mines have recently been sold by James H. Cox to the Chester-hill Company, who are now working them with a force of twenty labourers. Moody and Johnson have a lease of Anderson's land, next adjoining that of the Chester-hill Company, and employ a force of twelve operatives. These two workings together, last year, produced 200,000 bushels of coarser grade coal—the fine coal not being able to bear the cost of transportation, is still remaining at the pits. Whatever has been said as to the quantity and quality of the Chester-hill coal, is applicable to Moody and Johnson's coal, as all is taken from the same seam. The deepest shaft which has yet been sunk is 120 feet deep. The measures passed through were principally sandstones and shales. Impressions were frequently met with of ferns and other aquatic vegetables, but no fish or other animal remains. The bearing of this part of the field is N. 75° to the west of north, and inclines to the west as you proceed to the south, until near the river it is 30°. The same is the case on the western outcrop. This induces the belief that the basin is here rounding off, and that, at no great distance to the south of the river, the coal formation entirely disappears. This belief is confirmed by explorations made on that side of the river. Several mines were worked formerly on James River, on the western outcrop of the coal field, in Powhatan county, which are now abandoned, principally because the coal, both in quality and quantity, is not equal to the coal of Chesterfield, and will not bear working in a depressed state of the trade.

In Gloucester county, on the western outcrop, coal of good quality was formerly worked, and known as the Dover Pits, owned by Anderson and Moody, and conveyed to the Dover Coal Mining Company. These mines are not now worked, the company having failed. Since the failure of the Dover Company the miners have returned to the former owners; and on the coal side of the outcrop, on the Gloucester and Henric side of James River, are several other mines—some of them now in operation, and some not. The largest operation is that neighbourhood near the Messers, Crocker and Shedd, the owners of extensive mines, in good working condition, employing about 150 hands, and sending 200,000 bushels of coal the present year. Near these mines, on James River, are those of the Tuckahoe Coal Company. The old mines are out of work, but a shaft is sinking, reaching from fifteen to twenty hands. Near these are Woodward's and Carter's Mines, both now wrought. North-east of Crocker and Shedd's Mines is the Edge Hill pit, now worked, but not extensively, by Richardson, probably supplying some thirty hands, and producing about 50,000 bushels. On the north part of Crocker and Shedd's property, Thomas and Powell are engaged in building coal, but not working more than some twenty hands, producing the present year about

100,000 bushels. There may be some other mines in this vicinity not remembered. There is a railroad connecting these mines with the James River Canal, down which the coal passes to Richmond. The coal on the north side of James River sells for a lower price than that on the south side, being considered not as good.

Some four or five miles north of these mines is those called the Deep Run Pits, worked by John Barr, who at present employs some forty hands, and raises some 250,000 bushels of coal—the same steam-power. This coal is of fair quality, as is also that from Barton's Pits, now mined by Grimes and Co., who will probably take about the same quantity as Barr, and employ as many hands. The coal from these mines is transported to Richmond by the Fredericksburg and Richmond Railroad Company, a branch of their road having been extended to the pits. The charge for coal on this road is four cents per bushel from the mines to Richmond. The charge for hauling coal down the James River Canal, including tolls, is about three cents from the mines; that on coal passing the coal railroad in Chesterfield from the mines, to tide-water, is five and a half cents; for taking it from this road, at its junction with the Petersburg and Richmond Railroad, two cents per bushel to Richmond; to Petersburg four cents, including yardage at either place; and coal going by this road, to either Petersburg or Richmond, is entitled to half a cent per bushel deduction from the main coal road charge. The charge for transporting from the mines on the south side of Chesterfield county to Petersburg is about eleven cents per bushel, by waggon. It is in contemplation to branch, at some future day, from the main coal road to Warwick, about five miles below the present shipping yards at Manchester, where vessels of large size can load with coal with great facility—a bar just above that place preventing large vessels from going up to Manchester or Richmond. The charge for transporting coal on the principal coal railroad is unusually high, but will soon be reduced; it being the first road of the kind in Virginia, it was deemed prudent to make the transportation high, a dividend of 6 per cent. per annum, payable semi-annually, being authorised in the charter; the surplus raised from the five and a half cents per bushel being pledged to the refunding of the capital subscribed; this application has been faithfully made, until the whole of the capital, with the exception of some 12 per cent., has been repaid. When that is accomplished, the tolls are to be so reduced as to allow 6 per cent. upon the then nominal capital only, and to pay the expenses of transportation, at which time the charge for transportation ought to be reduced some two and a half cents per bushel; and if at that time the contemplated branching to Warwick shall take place, and locomotive power be substituted for the present expensive plan of using horse power, then the price of Virginia coal can be so lowered as to make it the interest of all consumers of bituminous coal on our Atlantic border to use it almost exclusively.

Remark by the senior Editor.—The coal of Virginia has been long known throughout the Atlantic States. From the Mid Lothian Coal Mines we have recently received a series of specimens, illustrative of the structure of this coal field. It is based upon granite, and consists of the usual alternations of sandstones, shales, cherts, and coal. The coal is of an excellent quality, and it appears, from printed certificates of many manufacturers, that it is used in very various operations requiring fire, especially in the different manufactures of iron, both in light and heavy work, and it is said to have been recently introduced into the manufacture of copper.

(We shall next week commence an important paper "On the Wisconsin and Missouri Lead Region," by James T. Hodge, Esq., in which are embodied some general observations on the geology of the country, &c.)

PROCEEDINGS OF PUBLIC COMPANIES.

ROYAL MAIL STEAM-PACKET COMPANY.

The first general meeting of the proprietors of this company was held at the London Tavern, Bishopsgate-street, on Wednesday, the 21st inst.

JOHN JAYNE, Esq., M.P., in the chair.

The advertisement convening the meeting having been read, the CHAIRMAN explained to the proprietors the present state of the company's affairs, and showed the obstacles that the company had had to contend with; he also alluded to the new plan for the management of the packets, which had been printed and circulated amongst the proprietors, expressing his opinion that, if that was followed out, the business of the company could be done at a remunerative profit to the shareholders. In carrying out this new plan, of course delay had taken place, from the necessity there was of application being made to the Admiralty and the various representatives of foreign powers. The directors had faithfully performed their duty to the company, by endeavouring, to the utmost of their power, to advance the interests of the proprietors; and thus they hoped, that, though they had not been successful, the proprietors would not esteem them, for that reason, the less worthy of their confidence, and that their conduct would be judged with candour, and that the proprietors would not allow themselves to be led away by the misrepresentations which had been so long about.

Captain CHAPPEL, R.N. (the secretary), read the

REPORT.

The directors have delayed calling the proprietors together till the present time, because, although at the time the company was established it was contemplated that the service contracted for with Her Majesty's Government would have been commenced in the year 1841, so as to have made it desirable to have a meeting of proprietors in that year, yet, as the service was not commenced, in consequence of unworkable delays, till January, 1842, the directors had nothing to communicate to the proprietors in the previous year which could render a meeting necessary; and they considered, under all the circumstances, that it was expedient to postpone the meeting until they had some experience of the working of the undertaking. As soon as the company was organised, the necessary contracts were entered into for the building and equipment of fourteen steam vessels, and as the directors were desirous that the company should have the best vessels and machinery that could be supplied, they invited competition from all parts of Great Britain. In the result, contracts were made for building four steam vessels in the river Thames, the engines for which were contracted to be supplied by two of the most eminent engineers in the metropolis. Seven vessels were contracted for with builders in Scotland, where the engines for six of which were also constructed, the engines for the other vessel being made by an engineer of Liverpool, who also supplied the engines for a vessel built at Cowes, and the remaining two vessels, with their engines, were contracted for at Bristol. In spite of every possible exertion on the part of the company, it was found impracticable to get a sufficient number of these steamers in readiness to commence the service before the end of the year 1841. The two vessels, however, contracted for at Bristol were not in a state of readiness, and it appeared to be impracticable when they would be completed, that the directors considered it important not longer to delay the commencement of the service, and, therefore, purchased two smaller steam vessels, which it was arranged should take the place of the two Bristol steamers until they should be in readiness, and the service was at length commenced on the 1st of January, 1842. In the original contract, a week and a half was allowed for the completion of the vessels, and the directors were bound upon the principal point of the arrangement, and the port of departure for Europe with the return mail. The Haytian Government, however, notwithstanding an application from Her Majesty's Government, would not admit foreign vessels into that port, and a new combination became necessary. After some consultation and discussion a resolution was passed, which was sanctioned by Her Majesty's Government, and the Lords Commissioners of the Admiralty, who, by the contract, have power, from time to time, to vary the route of all or any of the steam and sailing vessels employed in the performance of the contract, signified their assent to the being tried experimentally for six months. It has been a source of great regret to the directors that the service, at its commencement, was not performed with the regularity that could have been wished. This may be considered a great measure as incidental to the commencement of a new, extensive, and complicated undertaking, but some partly and from year which disturbance occurred by the extraordinary weather of the winter months, however, occurred, made in the various and difficult, and actually the ships have performed their respective services with regularity, and have satisfied the directors that they are well adapted for the work they have to perform.

The directors regret that after a few months' trial it appeared that in the society to enhance a large field for securing the benefit of the most extensive passenger traffic, and to provide for the convenience and accommodation of the colonies generally, more had been undertaken than could be properly accomplished by the resources of the company, and that the plan required more extensive resources than could be procured by the payment of the Government, and the return that could be expected from passenger, freight of money, &c. The directors, in consequence, represented the circumstances to Her Majesty's Government, who expressed a willingness to modify the service contracted for in such way as might make it remunerative to the company, provided the mail service between the colonies and Europe could be satisfactorily performed. After some discussion a new combination was adopted, and the Lords Commissioners of the Admiralty have signified their assent to its being tried experimentally for six months from the 1st of October, without prejudice to the contract. The combination as first agreed upon involved a steam service of 100,000 miles in the year, and though it was tried with thirteen vessels, yet the directors became satisfied that it could not be performed without seriously one, if not two, more steam vessels. The plan now to be commenced involves the employment of our twelve steam vessels, and a steam service of only 200,000 miles in the year. The proprietors will, therefore, perceive that this is a very important improvement in the position of the company, provided that the connection of the work will not be affected with a corresponding or any considerable diminution of the income from passenger, freight of money, &c. which the expense of conducting the same will be satisfactorily reduced. A plan of the contemplated service is before the meeting.

Having called on for the last time the proceedings and future prospects of the company, the directors will now read the attention of the proprietors to their financial position, and, in doing this, they are desirous that the proprietors should have before them all the information it is in their power to furnish, as to the expenditure of the capital that has been raised, and the result of its operations up to the present time, which the summary returns can be obtained. The statement of the company, under the sanction of the Lords Commissioners of the Admiralty, has been made in the usual and legal way, which will be found in the printed statement, and the value of 720,000 has been received, leaving 12,000 in arrears, paid of which is one year's interest on the loan of 700,000. During the 720,000, then actually received from the shareholders, the directors have found it necessary to raise, by way of loan, the further sum of 200,000, and there still remains to be

* There is found in connection with the coal of Barton's and Grimes's Pits, in Chesterfield, and on the north side of James River, of the same generally, a sub-stratum, composed of sand and gravel, which is said to be of great value, and very much appreciated as such.

paid to builders and others about the sum of 20,000, and they estimate the amount expended in the nature of capital at rather more than one million. The statement which will be submitted to the meeting will show how this sum has been expended, with the exception of the *Modena*, which was unfortunately lost, and upon which 40,000 was insured, the whole of the assets appearing in this statement may be considered as available for the purposes of the company. The next subject for consideration is the actual working of the undertaking from the 1st of January up to the 31st of August in the present year. By the statement which will be submitted to the meeting, it will appear that the cost for working for that period amounted to 200,400, and that the earnings during the same time were 21,400, viz. 1—

Contract money to 31st August £200,000
Passage money and freight received in this country 20,000
Ditto received in the colonies, about 12,000
Due by the Government for coals supplied 24,000

Leaving a balance of only 2400 towards providing for cost of insurance, wear and tear, and return on capital. It will also be seen, that the sum expended on account of capital exceeds the amount raised upon the shares by about 775,000, which latter sum it will be necessary to provide, and it is intended forthwith to make a call of 10s. per share, by means of which, and by the sale of such vessels as will not be required for the reduced service, the directors confidently hope that the undertaking can be satisfactorily carried out without making further calls upon the shareholders.

Before the directors conclude their report, it may be expected that they express their opinion on the prospects of the company under the plan of service which is to be experimentally tried for six months, to commence on the 1st of October. The directors have already stated that the difference in distance between 200,000 miles, and the work will only require two larger and two smaller steamers, from which it is obvious that there must be a great saving of expense. They may add, that the expense of working the entire service under the old system would have amounted to upwards of 300,000 per annum, exclusive of insurance, wear and tear, and interest on capital; whilst the charge under the restricted system is estimated at 75,000. The estimated amount of income must, at all times, be uncertain, but the directors are of opinion that their receipts from passage money and freight, together with the 200,000, which will continue to be received from Government, will be adequate for a dividend on the future operations of the company. The directors further express their strong conviction that the new system will be worked with such regularity as to recommend the service to the favour of the Government and the public, and satisfy both of the importance of the undertaking in a national point of view, in which case, should they be disappointed of gain, they would have great confidence in effecting the honourable consideration of the Government in support of those who have embarked their capital in an undertaking which will be then proved to be highly beneficial to the country.

The SECRETARY also read the following financial accounts, alluded to in the report:—

Statement of the Receipts and Expenditure of the Royal Mail Steam-Packet Company, to the 31st August, 1842, inclusive.—

RECEIPTS.	
Amount of capital paid up	£200,000
Outstanding securities not assigned, applicable to permanent capital	20,000
Ditto to the working of the fleet	12,000
Payments from Government	24,000
Passage money and freight received	20,000
Total	£276,000

EXPENDITURE.	
Building cost and outfit of twelve large steamers	£200,000
Purchase of two steamers and outfit	40,000
Building cost and outfit of three schooners	17,000
Payments on account of British ships	171,400
Cost of coal built	9,000
Purchase of lease at Southampton and other expenses	3,000
Loss of London office	1,000
Preliminary expenses for the formation of the company	14,000
Survey outlays for the construction of coal depots abroad	10,000
Fitting London offices	600
Coal	100,000
Coal sacks	4,100
Deposits and agencies—coaling, washing, purchase of provisions, &c., after clearing passage money and freight received in the West Indies	20,000
Stores and supplies received from Government	4,000
Outfit of ships for first and second voyages, stores, crews' wages, provisions, &c.	75,000
Salaries	8,000
General and incidental expenses	1,500
Office expenses, including rent, stationery, &c.	9,000
Balance in hand	21,000
Total	£1,306,000

Statement of the Receipts and Disbursements of the Royal Mail Steam-Packet Company, from 1st January to 31st August, 1842:—

DISBURSEMENTS.	
Coals purchased	£100,000
Less stock on hand	30,000
Coal sacks	4,100
Less stock on hand	7,000
Deposits and agencies—coaling, washing, pilotage, and provisions purchased in the West Indies, &c.	20,000
Stores and supplies received from Government	4,000
Outfit of ships for first and second voyages, stores, crews' wages, provisions, &c.	75,000
Current wages due on ships at sea	7,000
Salaries	8,000
General and incidental expenses	1,500
Office expenses, including rent, stationery, advertising, and travelling	9,000
Excess of earnings over disbursements	£700,000
Total	£1,306,000

EARNINGS.

Payments from Government	£200,000
Ditto, due on the 31st of August available	20,000
Earnings in passage money and freight received in the West Indies	20,000
Estimated amount of passage money and freight received in the West Indies to 31st August	12,000
Due from the Government for coals supplied, and sundry amounts for freight, &c.	24,000
Total	£276,000

Mr. LIGGINS moved that the consideration of the adoption of the report be adjourned until Wednesday, the 28th inst., and that it, together with the appendages, be printed and circulated amongst the proprietors. He had every respect for the directors, and trusted anything he might say would not be personally considered by them. A more respectable board could not be met in the city of London, but it was not in their individual capacity that they were to be addressed, but as a corporate body.—Mr. J. MOWBRAY seconded the resolution, which, after a few remarks from other shareholders, was carried unanimously.

The CHAIRMAN, on behalf of the directors, stated that this result was satisfactory, and that not the least objection was entertained by the board to publicity being given to any of their proceedings.—Captain CHAPPEL, R.N., said, convinced that the company could not bear the enormous expenses incurred in carrying on the operations; he thought that 200,000 would not be enough to carry on Government instead of 300,000, which they now received; and he also very much objected to the fact of the directors being so much interested in the company, as to be able to make a profit out of it, and that it was not in their individual capacity that they were to be addressed, but as a corporate body.—Mr. J. MOWBRAY seconded the resolution, which, after a few remarks from other shareholders, was carried unanimously.

Mr. LIGGINS, then, at some length, argued upon the insufficiency of the bye-laws, as made and acted upon by the directors, which, amongst other things, provided, that no proprietor holding less than five shares should be entitled to vote at any meeting, or even to be present, and that if all calls were not paid upon the shares before two months after such call should be made, the shares were forfeited without any notice, which he considered most unjust, as three, or even four, months would not be more than sufficient time for the shareholders residing in the colonies; and he also suggested that every shareholder should, previous to the annual meeting, be given to every shareholder in default. He next alluded to the constitution and classification in respect to the voting by proxy, for while the bye-laws refused to allow a shareholder even to be present if he only held four shares, yet permitted him to vote by proxy if he held only one share.—Several other points were touched upon, and the report having been ordered to be printed and circulated, the meeting adjourned to the 28th inst.

IRISH WASTE LAND IMPROVEMENT SOCIETY.

The proposed meeting of this society was again attempted to be held at the King's Head Tavern, Post-office, on Thursday, the 28th inst., but, as on the last three occasions, a sufficient number of proprietors could not be collected, and the meeting was, according to the Act, adjourned sine die. We purpose, in our next, giving an account of the present prospects of the company, which have very much improved.

BIRMINGHAM CEMETERY COMPANY.

At the last general meeting of the shareholders of this company, the report submitted by the directors stated that the number of interments in the year ending the 30th of June, 1841, was 233, and for the year ending June, 1842, they amounted to 260, being an increase of 27. The total number of interments since the opening of the cemetery amounts to 2120. A dividend of 10s. per share, free of income tax, was declared payable on the 28th and 29th inst., being at the rate of 5s. per cent. per annum.—The retiring directors Messrs. Joseph Black, Joseph Pope, William Rouse, Richard Hesketh, Charles Edge, Alfred Jackson, J. Robertson, B. Hudson, and A. Stanger, were re-elected for the ensuing year.

Sept. 18.—The wine is reported, 150 per cent. still about 200, in the city of London, but it was not in their individual capacity that they were to be addressed, but as a corporate body.—Mr. J. MOWBRAY seconded the resolution, which, after a few remarks from other shareholders, was carried unanimously.

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THE DISCOVERY OF COAL AT CWM TILFERY.
The discovery was noticed last week on having been made by Mr. Thomas Brown upon his property at Cwm Tillery, has been celebrated in the neighborhood by a sumptuous dinner. After Mr. Brown's health had been drunk, that gentleman said that the event they were met to celebrate was to him a most important one; he had been exploring, as it were, a new district, in which many natural difficulties presented themselves, and though he had every day doubt upon his mind as to what the property would really turn out, yet he must say that his most sanguine anticipations had been more than realized, for, in the words of a mineral man of great experience in the basin, second to none, and who had that morning accompanied him to the bottom of the pit, and there seen the coal (he meant Mr. Drakins, of Blaenau), the coal was of first-rate quality, and unusual thickness—in fact, mostly double the quantity of workable coal found in the Nantyglyn valley, and with an excellent top. In addition to this, it should be remembered that the pit, nearly seven feet in diameter, had been sunk with an engine of small power, and without the aid of pumps, the whole 130 yards; and this has been accomplished without the slightest accident to any person engaged thereon—some very excellent speeches were made, complimenting the worthy proprietor and his brother upon the spirit with which the work had been conducted, and the great success which had attended their endeavours; in the course of which Mr. James Brown's health was renewed and drunk with much enthusiasm. In returning thanks for the honour done him, that gentleman said that the success of his brother was most gratifying to him and all the family, and which nothing could be more satisfactory; he had given the matter his best aid and judgment, the result of which they well knew; he had no doubt that Cwm Tillery, though now a quiet vale, would ere long become a populous and flourishing district, in testimony of which, the completion of the whole Newport Dock, now so near at hand, would be a great advantage. Great importance as he held this dock to be, for the good of the county of Glamorgan, yet there was another much greater desideratum to be obtained, which was that of a railroad to Newport, to enable it to fully develop its mineral resources. In the last few months he had travelled repeatedly on the principal lines in the kingdom, and was forcibly struck with the great ease, beauty, and cheapness with which goods are conveyed thence, compared with a wretched speed, unnecessary sacrifice of property by loader, and heavy charges, upon the present line of communication. Nothing short of a railway could remedy this, and he is a firm of county possessing greater facilities for making railways than most others, if not any other, in England, he stated the day was not far distant when the present scheme could be done away with. His brother and he had always done their best to promote the interest and happiness of the working classes, from seeing whom they were out to buy they had sprung; and although the last three years were years unexampled deprivation, incurred by the combinations of wicked and dissipated men, some of whom were now paying the penalty for their misdeeds, he hoped that the "living line" had of length been found to have a turn, and they ardently desired to see the time come when they could withhold the services of the men they employed. They did not desire to see any rapid increase out of the bulk of a hard-worked and ill-paid people, but they hoped in the future all things prospered from in their endeavours; that they should not forget those who waited for them, and that their joy would come by seeing their workmen well paid, happy, and contented. After saying a high eulogium on the state of Cwm Tillery, Mr. B. resumed his seat and others.—Several other speeches were delivered, and the company engaged and, after drinking a toast to the health of the

PRICES OF MINING SHARES.